

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Tradomark Office Address COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/711,655	11/13/2000	Michael A. Freeman	1894-00501	7877
23505	7590 10/24/2002			
CONLEY ROSE & TAYON, P.C.			EXAMINER	
P. O. BOX 32 HOUSTON, T	67 °X 77253-3267		TUCKER, PHILIP C	
			ART UNIT	PAPER NUMBER
			1712	0
			DATE MAILED: 10/24/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

			//
	Application No.	Applicant(s)	
Office Action Commons	711655	FRE	FMAN
Office Action Summary	Examiner		Group Art Unit
	7.1.	ICKEN	1712
-The MAILING DATE of this communication appear	ars on the cover shee	t beneath the cor	respondence address—
Period for Reply	<u> </u>		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET OF THIS COMMUNICATION.	TO EXPIRE	MONTH(S)	FROM THE MAILING DATE
 Extensions of time may be available under the provisions of 37 Cl from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, If NO period for reply is specified above, such period shall, by def Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the term adjustment. See 37 CFR 1.704(b). 	a reply within the statutory ault, expire SIX (6) MONTH statute, cause the applicati	minimum of thirty (30 S from the mailing da on to become ABANI	a) days will be considered timely. te of this communication. DONED (35 U.S.C. § 133).
Status			
☐ Responsive to communication(s) filed on			·
☐ This action is FINAL.			
 Since this application is in condition for allowance exce accordance with the practice under Ex parte Quayle, 19 			the merits is closed in
Disposition of Claims		_	
\times Claim(s) $1-17$, $19-27$, $30-37$,	39-49,86-	103 is/are pe	ending in the application.
Of the above claim(s)		_ is/are withdrawn from consideration.	
		·- /	owed
☑ Claim(s) 102		is/are all	13 60
∇ Claim(s) $1-3$, $19-21$, $31-37$,	39,40, 43,44,4	is/are rej	13-98 ected.
Claim(s) $1-3$, $19-21$, $31-37$, Claim(s) $4-17$, $22-27$, 30 , 41 , 42 , 4	39,40, 43,44,4 +5,4 - 7,48,91,92		13—98 ected. ojected to.
Claim(s) 10^{2} Claim(s) $1-3$, $19-21$, $31-37$, Claim(s) $4-17$, $22-27$, 30 , 41 , 42 , 4	39,40, 43,44,4 +5,4 - 7,48,91,92	are subj	ect to restriction or election
☐ Claim(s)Application Papers		are subj requiren	ect to restriction or election nent
□ Claim(s)		are subj requiren	ect to restriction or election nent
☐ Claim(s)Application Papers	is □ approve	are subjection are su	ect to restriction or election nent
☐ Claim(s)	is □ approve	are subjection are su	ect to restriction or election nent
☐ Claim(s) Application Papers ☐ The proposed drawing correction, filed on ☐ The drawing(s) filed on is/are ob.	is 🗆 approve	are subjection are su	ect to restriction or election nent
☐ Claim(s)	is 🗆 approve	are subjection are su	ect to restriction or election nent
☐ Claim(s)	is 🗆 approve	are subjerequirent ed □ disapproved ner	ect to restriction or election nent
☐ Claim(s)	is 🗆 approve	are subjerequirent ed □ disapproved ner	ect to restriction or election nent
□ Claim(s)	is approve jected to by the Examin	are subjerequirent ed □ disapproved ner	ect to restriction or election nent
☐ Claim(s)	is approve approve iected to by the Examing approve iected to by the Examing approve iected to by the Examing approve in received.	are subjerequiremed □ disapproveder ed □ disapproveder eer	ect to restriction or election nent d.
□ Claim(s)	is approve iected to by the Examination is approved in Application is approved.	are subjected and disapproved	ect to restriction or election nent d.
□ Claim(s)	is approve approve iected to by the Examinary under 35 U.S.C. § 119 in received. In received in Applications have been received.	are subjerequirement and □ disapproved are subjered ar	ect to restriction or election nent d.
□ Claim(s)	is approve jected to by the Examinary under 35 U.S.C. § 119 in received. In received in Application and Bureau (PCT Rule 1	are subjected and are subjected are disapproved and are subjected are su	ect to restriction or election nent d.
□ Claim(s)	is approve jected to by the Examinary under 35 U.S.C. § 119 in received. In received in Application and Bureau (PCT Rule 1	are subjected and are subjected are disapproved and are subjected are su	ect to restriction or election nent d.
□ Claim(s)	is approve a percent is approve is in approve is approve is approved. In received, and applications have been received and Bureau (PCT Rule 1).	are subjected and are subjected are disapproved and are subjected are su	ect to restriction or election nent
□ Claim(s)	is approve approve iected to by the Examinary under 35 U.S.C. § 119 in received. In received in Application and Bureau (PCT Rule 1 in No(s).	are subjected are subjected in disapproved are subjected in disapproved are required are subjected	ect to restriction or election nent

Office Action Summary

Application/Control Number: 09/711655 Page 2

Art Unit: 1712

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3, 19-21, 31, 32, 34-37, 39, 40, 43, 44, 46, 49, 86-90, 93-98 are rejected under 35 U.S.C. 102(b) as being anticipated by Gupta (5437331).

Gupta teaches a fluid used for fracturing a subterranean formation which comprises a polymer viscosifier, and an encapsulated breaker which may contain an enzyme (see abstract, column 8, lines 25-34). Gupta teaches that the enzyme may be released by pressure, diffusion or volatization (column 5, lines 15-20).. Applicants claiming of a triggering signal is not precise, thus even diffusion would qualify as anticipating applicants claims. Furthermore, applicant has not defined the "normal conditions", or what abnormal conditions encompass, so as to distinguish from the prior art. With respect to claim 46, the polymer becomes a contaminant prior to cleanup.

Page 3

Application/Control Number: 09/711655

Art Unit: 1712

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 20, 21, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta (5437331).

Gupta teaches a fluid used for fracturing a subterranean formation which comprises a polymer viscosifier, and an encapsulated breaker which may contain an enzyme (see abstract, column 8, lines 25-34). Gupta teaches that the enzyme may be released by pressure, diffusion or volatization (column 5, lines 15-20). Gupta differs from the present invention in not teaching iso or exo-amylases. However, such would be obvious to one of ordinary skill in the art over the teaching of amylase by Gupta (column 8, lines 22-24).

5. Claims 4-17, 22-27, 30, 41, 42, 45, 47, 48, 91, 92, 99-101 and 103 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1712

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tucker whose telephone number is (703) 308-0529. The examiner's normal working hours are 7:30am-4:00pm, Monday-Friday. If necessary SPE Robert Dawson may be contacted at 703-308-2340. For inquiries of a general nature call the receptionist at 703-308-0651. The group FAX no. is 703-872-9310. The **after final** fax no. Is 703-872-9311.

PCT-2664 October 21, 2002

PHILIP C. TUCKER ART UNIT 1712